Medical Image of the Week: Barium Aspiration

Figure 1: Upright X-Ray of the chest showing dense opacifications in the bilateral lower lobes consistent with Barium Aspiration.

An 88-year old man was referred for video fluoroscopic swallow study (VFSS) for concerns of aspiration as the cause of his chronic cough. As part of the study, he was given barium sulfate nectar which he aspirated and developed respiratory distress and hypoxia requiring hospital admission. Chest X-ray obtained at that time is shown (Figure 1).

Although inert, acute inflammation and even death attributed to barium aspiration has been described (1,2). Severe respiratory complications tend to occur in patients with extensive comorbidities (2, 3). Treatment is mostly supportive and severe cases may require invasive ventilatory support. Bronchoscopy and suction clearance may be attempted although the success is variable. Recovery is usually complete although fibrosis is a known complication (4).

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